

IMAGE PROCESSING APPARATUS AND METHOD OF SAME

ABSTRACT OF THE DISCLOSURE

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An image processing apparatus for finding  
reflectivity based on a BRDF model expressing a ratio of  
reflection of light incident upon one point of a surface  
of an object to be drawn at the object surface, the image  
10 processing apparatus having an operation unit for  
calculating the reflectivity based on a BRDF model  
calculated by a quadratic-form matrix expression  
including a vector comprised of a light source direction  
vector, a viewpoint direction vector, and a normal  
15 direction vector and a matrix determining the  
characteristics of the BRDF model, thereby able to  
achieve both a variety of expression power and good  
operation efficiency when mounted in a programmable pixel  
shader and further having enough of a compactness to  
20 easily cope with a shift-variant BRDF, and a method of  
the same.